

BUREAU OF ENVIRONMENT

CONFERENCE REPORT

DATE OF CONFERENCES: April 5 and 12, 2007

Thursday, April 12, 2007

Portsmouth, BHF-T-0101(015), 13678. Participants: Kevin Nyhan, Mark Richardson, Steve Liakos, Bob Juliano, Karen Gola, Charlie Hood, Dave Powelson, and Bob Landry; Addie Kim, Jim Fisher, and Javier Salinas, HNTB; Gene Sawyer, Michelle Marshall, and Deborah Finnigan, City of Portsmouth; and Lynne Monroe and Carol Hooper, Preservation Company. Kirt Mohnney, Maine Historical Commission, participated by phone.

The purpose of this meeting was to present the preliminary designs developed for the various components of the Memorial Bridge to obtain input into final design and to review the status of cultural resource assessments/mitigation.

Jim Fisher presented an overview of the proposed Memorial Bridge Rehabilitation Project that will include “modified replication in kind” of the lift span (replacing the verticals, diagonals, cross bracing and sway bracing), rehabilitation of the two flanking spans, complete replacement of the Scott Avenue Bridge, and minor rehabilitation of the Kittery approach spans.

Javier Salinas reviewed the design of the architectural components of the project that has been performed to address historic considerations (see attached copy of the presentation). The materials proposed to be used in the design of the control house, machinery house, gatetender/storage houses consist of copper treated to achieve a weathered, green patina. The original machinery house was modified and extended in 1981 to raise the roof of the structure so that it extends higher than the top of the upper chord of the bridge. The proposed machinery house would be expanded on all sides, but would be housed within the structure of the bridge and would not extend above the upper chord.

Javier Salinas presented renderings of the buildings and indicated that the control house has been designed to be a one-story structure that would incorporate electrical equipment in a crawl space below the control center. The control center would incorporate views for the operator, workspaces on opposing sides of the room, and a wraparound walkway/railing outside the building. Mark Richardson inquired whether concrete panels would be used. Javier Salinas responded that copper panels would be used. Mark Richardson commented on building insulation, and Javier Salinas indicated that this would be evaluated. Mark Richardson inquired about the proximity of the control house to the counterweight, as someone was killed by the counterweight descending. Javier Salinas indicated that the line of the counterweight on the plans represent the facing edge, not the centerline of the counterweight. Mark Richardson commented that the crawlspace should be designed to allow workers to stand while maintaining/operating electrical equipment.

Javier Salinas indicated that the control house has also been designed to conform to the scale of the bridge structure and would be located within the tower. The structure would incorporate a lot of glass to allow for maximum visibility from within the structure. There would be enclosures for the droop cables.

The support frame would be a lacing member and would be designed to match the existing top chords. Mark Richardson commented on the need for the lacing members on the underside of the bridge and questioned the extra fabrication costs for this. He indicated that there is no intention to replicate the upper and lower chords, as this encourages roosting by birds, so these will be enclosed, rolled members. It was agreed that the support frame would not incorporate the lacing.

Jim Garvin questioned where the counterweight would be in relation to the control house when the bridge is in the raised position. It was indicated that the counterweight would be well above the house or at the house, and that it is rare for a full lift to occur. This wouldn't impede views from the control house. The control house was sized to be as small as possible and includes lockers and a shop area, eat-in kitchen, and bathrooms.

Mark Richardson questioned which way the computer screens would be positioned for the extra workstations, and whether glare on the screens will be an issue. Gene Sawyer indicated that, in the existing control house, the screens are above the operator's head, and the operators at their consoles face upstream. Mark Richardson inquired whether these consoles could be turned around, and Javier Salinas concurred with this change. Gene Sawyer inquired about running water and sewer, and it was indicated that the control house would be equipped with this.

Javier Salinas indicated that the gate tenders and storage houses for equipment would be cantilevered, which will free up space on the sidewalks. The storage houses would be located opposite from the gatehouses on each approach. The houses would be made of the same copper material with the green patina and would also incorporate glass to maximize views for the gate tenders. Mark Richardson inquired whether granite and gutters would be used, as shown on the drawing. It was discussed that the building will be copper and that the use of gutters will be studied.

Jim Garvin inquired whether the windows would be double-glazed or real glass. Javier Salinas indicated that the windows would be insulated glass.

Javier Salinas discussed a proposed elevator to be located in the north tower, starting at the top of the upper chord. At present, the only access to the top of the tower is a ladder. Bill O'Donnell inquired how access to the bottom of the elevator would be provided, and Javier Salinas indicated that an existing stairway within the truss could be used to provide access to the elevator. If the lift span is stuck in the up position, it is difficult to transport equipment and staff to the machine house.

The sidewalk surface will be constructed of recycled polyethylene planks that will be manufactured to replicate the existing wood planking on the sidewalks.

The plaques on the Memorial Bridge were discussed. Addie Kim indicated that the team was researching documentation on the plaques and the method through which they were originally mounted on the bridge, but no information on them has been found as of yet.

Jim Garvin indicated that insulation of members (between plaque and bridge) would minimize electrolytic action and that the plaques were typically constructed of bronze. The plaques were most likely bolted to the bridge. It was agreed that original mounting system did not need to be replicated exactly and that it might be difficult to find documentation on the plaques in the original bridge plans. The need to retain conservators experienced in preservation/restoration of these plaques was discussed.

Javier Salinas presented the renderings of the Scott Avenue Bridge that show the proposed railing and lighting designs. The railings were discussed. Kirk Mohny asked whether there would be a smooth transition on the verticals elements. He commented that the detail on the existing would be difficult to replicate. J. Salinas responded that there would be a smooth transition from the proposed railings on the Scott Avenue portion to the Memorial Bridge.

The light fixtures were discussed. Addie Kim indicated that, in a meeting with the Portsmouth DPW, it was indicated that colonial era lights are generally used in Portsmouth. However, the DPW indicated that they would like the light fixture used in the park at the corner of Daniel and Bow streets, which is Victorian, to be used on the Scott Avenue approach. J. Garvin indicated that the 1925 design used acorn-type fixtures. Mark Richardson inquired where the fixtures would be mounted on the bridge. Jim Fisher indicated that an analysis would need to be performed to determine the appropriate spacing and locations for lighting. He inquired about the availability of a specification for the lighting so that the designers can determine the spacing. Bill O'Donnell questioned whether lighting was needed on the bridge, and it was discussed that lighting would need to be provided. Steve Liakos indicated that for security reasons, lighting would be provided.

The city would prefer to paint the pedestrian railings black, as shown on the renderings. Addie Kim indicated that the city indicated a preference for black paint on the railings, but indicated that they would defer to the city's wishes and to the original historic color on the bridge. Preservation Company has indicated that it appears from the scratch test performed on the bridge and from historical research that the bridge was originally painted black. Lynne Monroe indicated that Waddell specified red lead as a base coat, with two follow up coats. Different color references that were found for the final coating were for black carbon, graphite, all referring to black. Pictures from the 1940s provided by Dave Powelson also indicate that the bridge was black. Lynne Monroe pointed out that, in the photo from the Historic Structures Report (page M65), the bridge also appears to be dark.

Addie Kim indicated that Maine DOT does not plan to paint the Kittery approach spans, so the bridge may remain green. Bob Landry indicated that the pigeon and seagull droppings would show up more clearly with a black color. Steve Liakos indicated that input would be obtained from the public into the decision. Mark Richardson indicated that black may fade faster and that it may not look the same with the copper. He also noted that the bridge has been green longer than it has been black, and the public preferences would be weighed in the decision. Mark Richardson asked Jim Garvin whether the SHPO would have objections to this. Joyce McKay inquired whether this was a historic resource issue. Jim Garvin indicated that the most significant finding was that the original paint color was black, but that the final paint color was surficial. Linda Wilson concurred and indicated that paint color can always be changed.

Jim Fisher raised the status of the Historic Structures Report. Lynne Monroe indicated that the Draft Historic Structures Report was circulated for comment. Joyce McKay indicated that she has forwarded her comments and comments were received from Jim Garvin. Kevin Nyhan indicated that large format photos of original plans need to be included in the Final Historic Structures Report. Also, a professional photographer such as Charley Freiberg was going to document the building process.

Work in Memorial Park was discussed. Lynne Monroe mentioned that the Pier II project is scheduled to start in June. Addie Kim indicated that the Scott Avenue Bridge option that is preferred would involve building behind the existing abutment. The handout indicates that extent of temporary disturbance anticipated to the park area from the abutment excavations. Bob Landry inquired about temporarily disturbing the entire park area, for use in construction staging. Jim Garvin inquired whether padding would be used over the surface, by placing mats. Bob Landry indicated that the shrubbery may be temporarily displaced. Joyce McKay indicated that the park is being designed by the city, and it is assumed that vegetation would be removed. Addie Kim inquired about the monument/plaque in the park, and it was discussed that this plaque should be temporarily removed from the site during construction and returned upon completion of construction.

Addie Kim indicated that archaeological monitoring during the geotechnical borings indicated that there was brick debris that was interpreted to represent a demolition layer. This debris was encountered at depths of between 5 feet along the waterfront and between 14 to 26 feet around the Scott Avenue Bridge. The results imply that the area under Memorial Park at the Scott Avenue Bridge site consists of a thick layer of fill that was emplaced when the approach was constructed. However, prior archaeological investigations in Memorial Park were performed to a depth of 4 feet, and the commitment to monitor excavations below 4 feet in the park will be adhered to during construction. Edna Feighner indicated that a monitor should be present during excavations in the park and work stoppages should be employed should artifacts be encountered.

Bob Landry indicated that the construction schedule is aggressive, and construction delays should be minimized to the extent possible. The issue of whether construction would be stopped in the event of a discovery was raised. Addie Kim indicated that the archaeological monitoring protocol developed by IAC for the project outlines a procedure that states that work stoppages may extend for up to 8 to 24 hours. This monitoring protocol will be attached to a supplement that will be submitted shortly on the end of field report for the geotechnical monitoring. Mark Richardson indicated that this work should be conducted through the night if necessary to expedite the construction schedule. HNTB agrees to negotiate this point with IAC.

Joyce McKay indicated that she has contacted the Trustees of Trust Funds for permission to place the historic marker within Prescott Park. She has also been in contact with the city on their historic marker program to develop a sign that will be consistent with this program. Addie Kim indicated that a backup location within the right-of-way suggested by the Portsmouth DPW in the event that the Trustees do not grant permission would be the sidewalk along the Scott Avenue Bridge approach, where the sidewalk is wide. Jim Garvin indicated that a location within Prescott Park adjacent to the Walker Coal pier would provide a better vantage point of the bridge. Joyce McKay indicated that she would be looking to Preservation Company for wording to place on the

sign. Lynne Monroe requested that Jim Garvin provide guidance for the text for comparable historic signs.

It was discussed that the Historic Structures Report would be made available in several repositories, including libraries and Strawberry Banke. Joyce McKay also recommended that the report be sent to the State of Maine.

Bob Landry mentioned that security issues are being resolved for the bridge and inquired whether there were any other comments or issues. Kirk Mohny mentioned that his copy of the presentation did not include renderings of the elevator and requested that these be sent to Maine HPC. He inquired whether the elevator would have the same sheeting material. Javier Salinas indicated that the elevator would be designed with a color that matches the bridge. Jim Garvin requested that a graphic of the droop cables be distributed by e-mail. [This was subsequently done.]

Mark Richardson commented that the project team had made a commendable effort to address the SHPO concerns. Linda Wilson commented that the review process has been a congenial one in working with the project team.